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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/575,773	04/12/2006	Gerhard Runze	NL031209US1	3818

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EXAMINER	
JEANGLAUDE, JEAN BRUNER	
ART UNIT	**PAPER NUMBER**
2819	

NOTIFICATION DATE	DELIVERY MODE
11/08/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ip.department.us@nxp.com

Office Action Summary	Application No.	Applicant(s)	
	10/575,773	RUNZE, GERHARD	
	Examiner	Art Unit	
	Jean B. Jeanglaude	2819	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 April 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *12 April 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *4-12-06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Specification

Abstract

1. Applicant is reminded of the proper language and format for an abstract of the disclosure. The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details. The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2. The use of the word phrase " the present invention" should be avoided.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 – 3, 6, 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Himeno (US Patent Number 5,400,271).

5. Regarding claims 1, 8, Himeno discloses a data processing device and method (figs. 1, 9, 10) for receiving an input stream of first data samples at a first rate and for generating an output stream of second data samples at a higher second rate by inserting additional data samples generated from said first data samples, said device comprising: a) memory means (1, fig. 1) for storing a predetermined one of said first data samples (abstract; col. 1, lines 39 – 59; col. 4, lines 39 – 50; col. 17, lines 10 - 18); and b) time adjusting means for adjusting the timing of said output stream (figs. 1, 9, 10)[the timing in the circuitry is controlled or adjusted because the switches shown in fig. 1, for instance is controlled by the system) said time adjusting means comprising: b1) skipping means for skipping first predetermined ones of said second data samples derived from said stored predetermined one of said first data samples (col. 4, lines 39 – 50; col. 17, lines 10 – 18).; and b2) replacing means for replacing second predetermined ones of said second data samples following said skipped first predetermined ones of said second data samples by new second data samples derived from said stored predetermined one of said first data samples (col. 1, lines 39 – 59; col. 4, lines 39 – 50; col. 17, lines 10 – 18).

6. Regarding claim 2, Himeno discloses a device (figs. 1, 9, 10) wherein said data processing device is an interpolation filter in which said second data samples are obtained by successively multiplying each of said first data samples by a set of filter coefficients, and by adding an obtained result of multiplication at a predetermined filter stage to a delayed result of the preceding filter stage, wherein said delayed result has

been delayed by a delay time corresponding to a time period of said first rate (col. 5, lines 20 – 35; col. 7, lines 59 – 68; col. 14, lines 39 – 56).

7. Regarding claim 3, Himeno discloses a device (figs. 1, 9, 10), wherein said skipped first predetermined ones of said second data samples are skipped at each filter stage and are derived from a result of multiplication of said stored predetermined one of said first data samples with respective starting ones of said set or filter coefficients, said replaced second predetermined ones of said second data samples are replaced at a predetermined filter stage and are derived from a result of multiplication of a predetermined number of first data samples following said stored predetermined one of said first data samples with the respective starting one of said set of filter coefficients, and said new second data samples are derived from a result of multiplication of said stored predetermined one of said first data samples with the respective starting ones of said set of filter coefficients of other filter stages different from said predetermined filter stage (fig. 1; abstract; col. 1, line 39 to col. 6, line 27; col. 4, lines 39 – 50; col. 17, lines 10 – 18).

8. Regarding claim 6, Himeno discloses a device (figs. 1, 9, 10) further comprising third switching means for successively supplying said set of filter coefficients to multiplying means of said other filter (fig. 1)[note in fig. 1, there are a plurality of switches which are switched wherein the coefficients are fed to element 7]..

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claims 4, 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Himeno (US Patent Number 5,400,271) in view of Rauth et al. (US Patent Number 5,548,542).

11. Regarding claims 4, 5, Himeno discloses all the limitations as discussed above except the device further comprising first switching means for supplying said stored predetermined one of said first data samples to a multiplying means of said predetermined filter stage (claim 4); a device comprising second switching means for intermittently supplying said respective starting ones of said set of filter coefficients of said other filter stages and said set of filter coefficients of said predetermined stage to said multiplying means of said predetermined stage (claim 5) and a device comprising fourth switching means for connecting an input terminal of said data processing device to a zero data value so as to introduce a predetermined delay to said second data samples. However, Rauth et al., in a related field, discloses device further comprising first switching means for supplying said stored predetermined one of said first data samples to a multiplying means of said predetermined filter stage (fig. 3)[as seen in fig. 3 data is inputted to a register 304; this data is selected and fed to register 314 and the mixer 324] and a device comprising second switching means for intermittently supplying

said respective starting ones of said set of filter coefficients of said other filter stages and said set of filter coefficients of said predetermined stage to said multiplying means of said predetermined stage (as seen in fig. 3, the multiplexer has the ability to make many selections and coefficients are fed to the multipliers 332, 334) and a device (fig. 3) comprising fourth switching means for connecting an input terminal of said data processing device to a zero data value so as to introduce a predetermined delay to said second data samples (paragraph bridging col. 2 and 3) . Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Himeno's system with that of Rauth et al. in order to filter digital data streams.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. (See PTO-892).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean B. Jeanglaude whose telephone number is 571-272-1804. The examiner can normally be reached on Monday - Friday 7:30 A. M. - 5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rexford Barnie can be reached on 571-272-7492. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jean Bruner Jeanglaude
Primary Examiner
October 28, 2007